

## PATENT SPECIFICATION



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## COMPLETE SPECIFICATION.

### Improvements in Means for Fixing Window and Door Frames in their Openings.

I, VALTER KONSTANTIN HULTIN, of 18, Kungsträdgårdsgatan, Stockholm, Sweden, of Swedish nationality, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention consists in a method for fixing window- and door frames in their openings, which method consists in inserting the frame in the window- or door opening, as the case may be, in such a manner that by this means an automatic spring locking device comes into operation and locks the frame in a definite place in the window- or door opening. The invention also refers to an arrangement for carrying into effect this method, and this arrangement consists of spring stops (springs, bolts, acted upon by springs, etc.) fitted to the frame or boundary wall of the window- or door opening respectively, said spring stops being designed and arranged in such a manner that when the frame is pushed in, they first give way and allow of the frame being pushed in, and after that in the inserted position of the window- or door snap into some notches, hooks or such like in the said boundary wall or frame, as the case may be, and lock the window or door respectively.

On the accompanying drawing the present invention is illustrated. In Fig. 1 is shown in horizontal section a portion of a window frame in inserted position. Fig. 2 and 3 show a detail. 1 is the frame and 2 the boundary wall of the window opening, which is shown bevelled like the window frame in order to bring about a better closing-up between them. In the frame there is made a notch 3, in which is fixed or bent a leaf spring 4, which is shown in detail in Fig. 2 and 3, seen from the one lateral edge and front

respectively, in a compressed position. The spring has a tongue 5 which in this compressed position of the spring projects from the latter and is kept in this projected position under spring tension. When the compression on the spring 4 ceases, it naturally stretches and becomes flat and the tongue 5 is then made to rest in the spring 4 on the same level as the latter. It is clear that, if we push in the frame with the spring 4 attached in the notch 3, the tongue 5 will first be pressed in against the frame and permit of pushing in, after which the tongue 5 snaps into notch 6 in the boundary wall 2 and locks the frame 1. Of course, the spring 4 with notches 3 and 6 shown on the drawing can be replaced with other devices operating in a similar manner.

After the frame has been fixed a binding liquid may be poured into channels between the frame and the boundary wall, formed by grooves in the two latter or in one of them, which channels may communicate with notches for housing the spring stops. These channels may occupy the whole or a larger or smaller portion of the circumference of the frame. In the frame 1 are made small notches 7 in which a portion of the binding liquid may enter in order to maintain the tightness when the liquid has stiffened.

In the manner stated and with the arrangements indicated one may rapidly, conveniently and securely fasten the frames and get a good binding and tightening between them and the boundary wall of the window- or door opening, as the case may be.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A method for fixing window- or

door frames in their openings, consisting in pushing the frame into this window- or door opening in such a manner that during the process an automatic spring locking device is brought into operation and locks the frame in a definite place in the window- or door opening respectively.

2. An arrangement for carrying into effect the method stated in Claim 1 consisting in spring stops (springs, bolts, actuated by springs *etc.*) fitted or attached to the frame or boundary wall of the window- or door opening, as the case may be, these spring stops being arranged in such a manner that on pushing in the frame they first give way and permit of the pushing in and afterwards in the pushed-in position of the window- or door frame snap into notches, hooks or such like in the said boundary wall or frame, as the case may be, and lock the window or door frame respectively.

3. An arrangement according to Claim 2, characterised by the spring stop consisting of a leaf spring, in which has been cut a longitudinal tongue which, on

pressing the ends of the spring towards each other so that the spring assumes the form of an arch or bow, is shot out from the spring.

4. An arrangement according to Claims 2 and 3 characterised by the leaf-spring according to Claim 3 being attached, compressed into an arch or bow, in a notch in the frame or boundary wall, with the tongue projecting from the spring and ready, when the frame is being inserted, to snap into a notch in the boundary wall or frame, as the case may be.

5. A method according to Claim 1 characterised by the fact that after insertion of the frame a binding fluid is poured in channels between the frame and boundary wall, formed by grooves in these two latter or one of them, which channels may communicate with notches for housing the spring stops.

Dated the 23rd day of September, 1924.

For the Applicant,  
LARS HAMREE.

[This Drawing is a reproduction of the Original on a reduced scale.]

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